

A positive resist composition which comprises a novolac resin, a radiation-sensitive quinonediazide compound and a thioxanthone compound represented by the following formula (I):

$$\begin{array}{c|c}
R^7 & R^8 & R^1 \\
R^6 & R^5 & R^4 \\
R^6 & R^5 & R^4
\end{array}$$
(I)

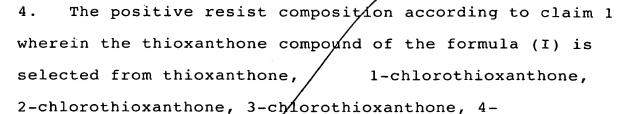
wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 and R^8 independently represent hydrogen, halogen, alkyl, alkoxy, aryl, carboxyl or alkoxycarbønyl.

The positive resist composition according to claim 1 wherein amount of components of the novolac resin having a molecular weight of /1,000 or less are 25% or less based on the total amount of the novolac resin excluding unreacted phenol compound, when the amounts are represented by the pattern areas of /gel permeation chromatography, wherein the pattern areas refer to values measured by an UV detector at 254 nm and the molecular weight refer to a value based on that of polystyrene as a standard.

The posttive resist composition according to claim 1 20 3. which further comprises a low molecular weight alkali-soluble phenol compound in an amount within a range of 3 to 40% by weight based on the total amount of the novolac resin and the low molécular weight alkali-soluble phenol compound.

10

15



- 5 chlorothioxanthone, 1-methylthioxanthone, 2-methylthioxanthone, 3-methylthioxanthone, 4-methylthioxanthone, 1-ethylthioxanthone, 2-ethylthioxanthone, 3-ethylthioxanthone, 4-ethylthioxanthone, 1-sopropylthioxanthone, 2-
- isopropylthioxanthone, 3-isopropylthioxanthone, 4-isopropylthioxanthone, methyl thioxanthone-1-carboxylate or methyl 7-methylthioxanthone-3-carboxylate.
 - 5. The positive resist composition according to claim 1 or 3 wherein the amount of the thioxanthone compound is about from 0.01 to 5 parts by weight based on 100 parts by total weight of the novolac resin and a low molecular weight alkali-soluble phenol compound.

 $Add b^3$